CLAIMS:

1. A scalable method for analyzing a network, comprising:

generating a data trace representative of the network;

determining a topology for the network from the data trace; and

sequentially analyzing each frame in the data trace to determine at least one of network errors, warnings, and metrics, the analysis of each frame comprising:

analyzing a first protocol layer of the frame with a first expert engine;

determining if a second protocol layer is present in the frame;

passing the frame to a second expert engine; and

passing the frame to additional expert engines if the frame contains additional protocol layers.

2. The method of claim 1, wherein each of the protocol layers comprise one of the layers in the OSI seven layer or Fibre Channel FC-0 to FC-4 protocol standards.

3. The method of claim 1, wherein each expert engine is configured to analyze a specific protocol layer.

4. The method of claim 3, wherein each expert engine is configured to analyze a protocol layer for at least one of errors, warnings, and metrics, and then pass the frame onto other engines for analysis of additional protocol layers in the frame.

5. The method of claim 1, wherein the first expert engine is configured to analyze a first protocol layer taken from any data format.

6. The method of claim 1, wherein the expert engines are configured to analyze specific protocol layers regardless of the data format origin.

7. A method for analyzing a network, comprising:

determining a topology of the network;

capturing a data trace representative of network operation;

parsing through the data trace on a frame by frame basis; and

analyzing each protocol layer of each frame for errors using a protocol specific engine to analyze each protocol layer of each frame.

8. The method of claim 7, wherein analyzing further comprises:

a) analyzing a first protocol layer of the frame with a first protocol engine specifically configured to analyze the first protocol layer to determine errors for the first protocol layer;

b) determining if the frame has additional protocol layers;

passing the frame to a second protocol engine specifically configured to analyze the second protocol layer for errors if additional protocol layers are determined.

9. The method of claim 8, further comprising repeating steps (a) and (b) for additional protocols until each protocol of the frame has been processed.

10. The method of claim 8, wherein each protocol engine is configured to analyze a specific protocol layer regardless of the data format origin.

11. The method of claim 7, wherein the frame is a multilayer protocol frame.

12. The method of claim 7, wherein analyzing comprises using the determined topology of the network to determine errors for each protocol layer.

13. The method of claim 7, wherein determining the topology comprises analyzing the data trace for indicators of devices on the network.

14. The method of claim 7, wherein capturing the data trace comprises positioning at least one analyzer in communication with the network.

15. The method of claim 14, further comprising positioning the analyzers such that bidirectional communication for each device on the network is captured in the data trace.

16. A method for analyzing a network having multilayer protocol frames, comprising:

capturing a data trace from the network;

determining a topology of the network from the data trace;

stepping through each frame in the data trace to determine errors at each level of the multilayer protocol frame; and

presenting the determined errors to a user via a graphical interface.

17. The method of claim 16, wherein stepping through each frame in the data trace comprises:

parsing a first protocol layer from the frame;

analyzing the first protocol layer for errors using a first protocol layer expert engine;

storing errors determined by the first protocol engine;

determining if the frame contains additional protocols;

passing the frame to a second protocol engine if the frame is determined to contain additional protocols;

parsing a second protocol layer from the frame for processing by the second protocol engine; and

analyzing the frame with the second protocol engine to determine errors in the second protocol layer.

18. The method of claim 17, further comprising repeating the analyzing and passing steps until each protocol layer of the frame has been analyzed.

19. The method of claim 17, wherein each protocol layer may originate from various data sources and protocols.

20. The method of claim 17, wherein the analyzing steps include using the determined network topology.